





## **Off-Duty Safety**

Protecting DA Personnel and Families

#### **Terminal Learning Objective**

Action: Recommend control measures that can be emplaced to reduce off-duty injuries that affect Soldier's combat readiness.

**Conditions:** Given scenarios describing off-duty activities.

**Standards:** Recommendations must be feasible and based on the fivestep Composite Risk Management (CRM) process.

#### **Lesson Data**

- Class Safety Requirements
- Lesson Risk Assessment
- Environmental Conditions
- Evaluation You will be evaluated based on your participation during class discussions and answers to the Checks-on-Learning.

#### References

- AR 385-10, The Army Safety Program, 23 August 2007
- DA Pam 385-1, Small Unit Safety Officer/NCO Guide, 29 Nov 2001
- DA Pam 385-10, The Army Safety Program, 24 Aug 2007
- FM 5-19, Composite Risk Management, August 2006

#### **Additional Sources**

- http://www.cdc.gov
   Centers for Disease Control and Prevention
- http://www.nasbla.org
   National Association of State Boating Law Administrators (NASBLA)
- http://www.uscg.mil http://www.uscgboating.org United States Coast Guard
- http://www.aapcc.org
   American Association of Poison Control Centers

#### **Additional Sources**

Continue d

- http://chppm-www.apgea.army.mil
   U.S. Army Center for Health Promotion and Preventive Medicine
- http://www.nfpa.org
   National Fire Protection Agency
- https://crc.army.mil
   Risk Management Information System (RMIS)
- http://www.nraila.org
   National Rifle Association of America,
   Institute for Legislative Action

#### **Overview**

 Off-duty safety and application of Composite Risk Management (CRM) to:

Sports and recreational activities

- Swimming
- Boating
- In and around the home



#### **Enabling Learning Objective A**

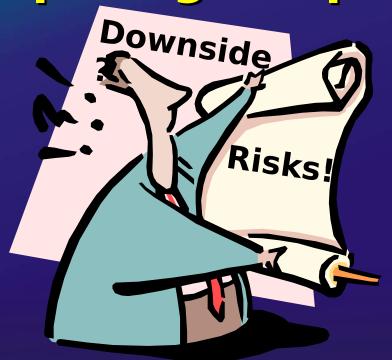
- **Action:** Recommend control measures that can be emplaced to reduce off-duty sports injuries that affect Soldier's combat readiness.
- **Conditions:** Given scenarios relating to off-duty sporting activities and the five CRM process steps.
- **Standards:** A minimum of two recommendations must be provided and feasible based on the five-step Composite Risk Management (CRM) process.
- NOTE: Be prepared to discuss recommended control measures in reference to the Composite Risk Management process.

# Why Personnel Participate in Off-Duty Sports

- For the benefits!
  - Provides physical conditioning
  - Compliments physical fitness programs
  - Builds camaraderie and teamwork
  - Reduces stress
  - It's fun



# What's the Downside of Participating in Sports?



Sports – second highest cause in off-duty disabling injuries (motor vehicle is first)

### Top 10 Injury Related Sports

Activity	2005	2006	2007	Total 3-yr
Basketball	26	43	28	97
Football	22	12	12	46
Swimming	6 (5)	6 (6)	5 (3)	16 (14)
Boating	7 (5)	5 (4)	12 (9)	24 (18)
Biking	13	13	9	35
Softball	6	12	11	29

FY 2005 / 2006 / 2007 RMIS
Class A-C injuries (parenthesis equals Class A)

### Top 10 Injury Related Sports

Continue

Activity	2005	2006	2007	Total 3-yr
Skiing / Snowboardi ng	4	11	10	25
Soccer	3	9	1	13
Volleyball	1	5	5	11
Running / Jogging	4	4	2	10
Weightlifting	4	3	1	8

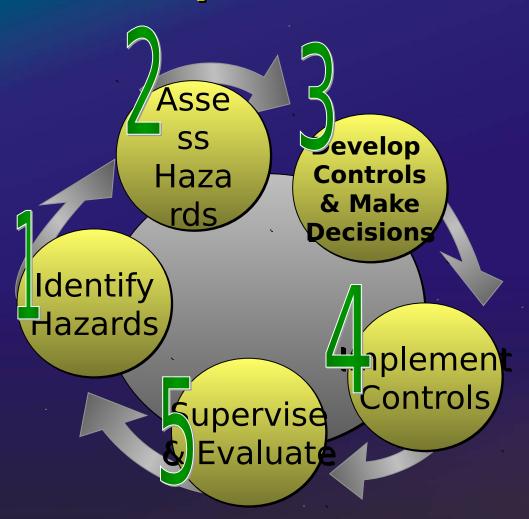
FY 2005 / 2006 / 2007 RMIS Class A-C injuries

# Off-Duty Sports and Recreation



How can we be sure that the benefits outweigh the risk?

# Composite Risk Management 5-Step Process

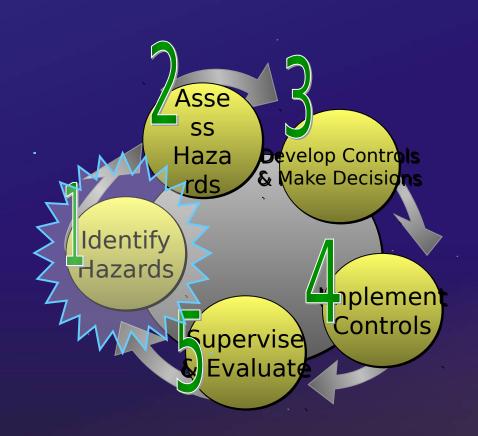


#### Team & Individual Sports

- Team sports that produce the most injuries
  - Basketball
  - Football
  - Softball
- Individual sports that produce the most injuries
  - Water sports (boating, jet skiing, swimming)
  - Winter sports (skiing, snowboarding)
  - Biking

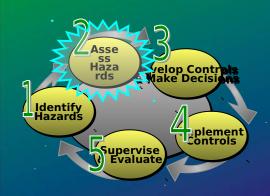
#### **Identifying Hazards**

- Lack of protective clothing
- Poor conditioning
  - Individual ability
  - Individual skill
- Lack of adequate coaching
  - Violation of rules
  - No supervision



### Team Sport Injuries





### **Basketball Injuries**

- Foot / ankle injuries
- Knee injuries
- Facial injuries
- Hand / wrist injuries

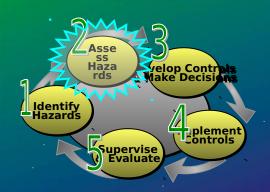




### Football Injuries

- Leg / knee injuries
- Hand / wrist injuries
- Arm / shoulder injuries



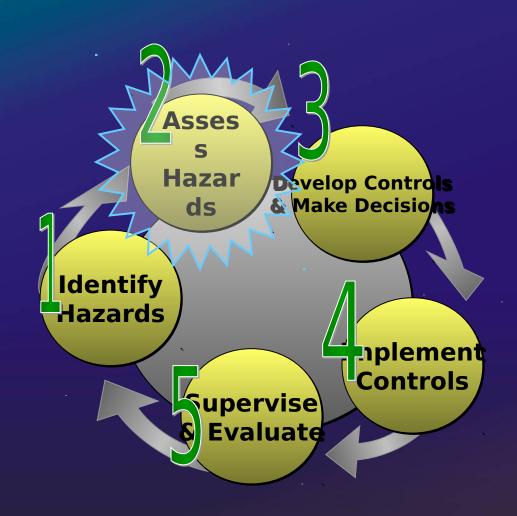


### Softball Injuries

- Ankle injuries
- Leg / knee injuries
- Hand / finger injuries
- Face injuries



### **Individual Sport Injuries**





### **Swimming / Boating**

- Drowning
- Spinal cord injury / paralysis
- Discussed in more detail later





#### **Skiing / Snowboarding**



 Arm / rib / spine / wrist





#### **Biking**

- Shoulder / collarbone
- Hand / wrist
- Arm / elbow





# Develop & Implement Controls

- Stretching and warm-up prior to conducting exercise
- Wear proper personal protective equipment (PPE)
- No alcohol prior to or during activity
- Don't over-estimate your ability
- Apply Composite Risk Management



#### Develop & Implement Controls

- Other controls?
  - Basketball
  - Football
  - Softball
  - Boating / swimming
  - Skiing / snowboarding
  - Biking



# **Supervise and Evaluate Control Measures**

- Conduct monthly performance counseling
- Talk to Soldiers and get to know them
- Use "under the oak tree" counseling
- Identify risk-taking Soldiers
- Continue leader engagement / involvement

### **Questions or Comments?**



#### **Check on Learning**

- What team sport produces the most injuries?
  - Basketball
- Name at least two actions (controls) a Soldier should take to reduce the risk of injuries while participating in sports?
  - Controls may include: wearing proper PPE, do warm-up activities, avoid alcohol consumption
- How can leaders help reduce off-duty injuries or deaths of Soldiers?
  - For example, apply CRM and be involved

#### **Enabling Learning Objective B**

**Action:** Recommend control measures that can be emplaced to reduce off-duty swimming injuries and drownings.

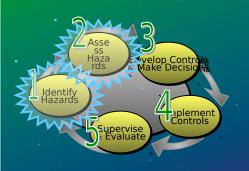
**Conditions:** Given scenarios relating to off-duty swimming activities.

**Standards:** A minimum of two recommendations must be provided and feasible based on the five-step Composite Risk Management (CRM) process.

NOTE: Be prepared to discuss recommended control measures in reference to the Composite Risk Management process.

# Preliminary Loss Report Extracts

- Soldier suffered a permanent total disability (broken neck) when he dove from a ledge into a river and struck a submerged pipe
- Soldier suffered a permanent total disability when he dove into a swimming pool at the middle depth while intoxicated and struck his head on the bottom of the pool breaking his neck



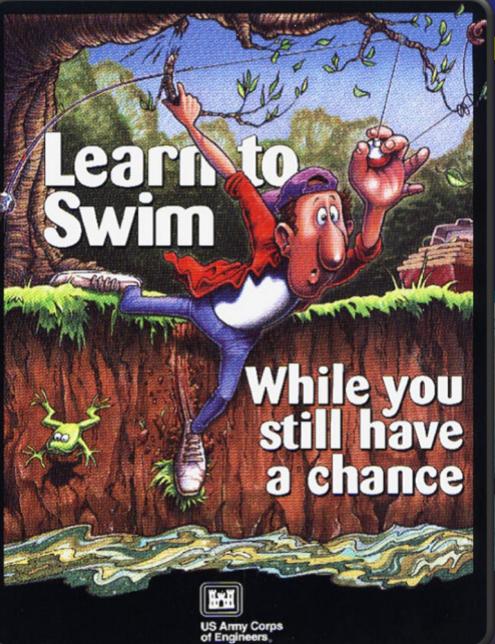
# Swimming Hazards & Trends

- Unfamiliar with environmental factors
  - Obstacles within the water
  - Cold water
  - Current / undertow
- Consuming alcohol
- Over-estimate swimming skill

#### Inf

#### Child dr





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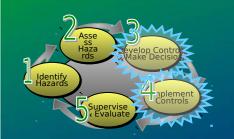




# Swimming Control Measures

- Only swim in authorized areas
- Follow posted rules
- Avoid individual and environmental hazards
- Check depth before diving
- Keep distance from diving board





# Swimming Control Measures Continu ed

- Know your limitations / ability
- Improve personal swimming skills
- Swim with others; never swim alone
- Don't substitute floats for personal flotation device
- Don't drink alcohol and swim
- Learn rescue techniques

### **Questions or Comments?**



#### **Check on Learning**

- What water-related activity most often causes permanent disabilities?
  - Diving
- Whenever around water, what devices should always be present?
  - PFD (Personal Flotation Devices)
- How can we help prevent future swimming related injuries from happening?

#### **Enabling Learning Objective C**

**Action:** Recommend control measures that can be emplaced to reduce off-duty boating injuries and deaths.

**Conditions:** Given scenarios relating to off-duty boating activities.

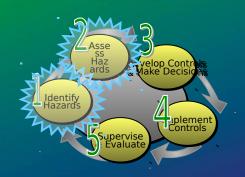
**Standards:** A minimum of two recommendations must be provided and feasible based on the five-step Composite Risk Management (CRM) process.

Soldier was on R&R leave from Iraq and while fishing with a family member from the Jon-boat, the boat submerged.

Soldier drowned attempting to swim to shore.

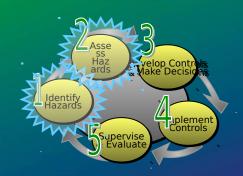
#### Note:

- No personal flotation devices worn
- Exceeded weight limitations for boat
- Poor swimming ability



### **Boating Hazards & Trends**

- Not wearing personal flotation device
- Lack of operator training and experience
  - Boat safety course (state specific)
  - First time on water



# **Boating Hazards &**Trends Continu ed

- Not following safe boating procedures
  - Speeding
  - Consuming alcohol
  - Losing situational awareness



- Attend safe boating course (required by many states)
- Ensure personal flotation devices (PFDs) are worn
- Avoid alcohol consumption if operating a boat (no drinking and driving)
- Prepare a float plan (similar to a flight plan)
- Be prepared to survive cold water
- Don't overload the boat



- When boarding stay low
- Never stand in a small boat
- Watch your wake speed
- Know what to do if someone falls overboard
- Follow boating rules with all personal watercrafts
- If boat capsizes, stay with it

#### **Personal Flotation Devices (PFDs)**











## PFD - Type I Off-Shore Life Jacket

- Provides the most buoyancy
- For oceans and exposed waters in cases of delayed rescue
- Designed to turn most unconscious wearers to a face-up position



#### PFD - Type II Near Shore Vest

- Inland lakes and rivers
- Will turn some unconscious wearers to a face-up position



### PFD - Type III Flotation Aid

- Designed so wearers can place themselves in a faceup position
- May have to tilt head back to avoid turning facedown in the water
- Used for water sports





### PFD - Type IV Throwable Devices

- Ring buoys, horseshoes and cushions
- Calm, inland water with heavy boat traffic
- Not designed to be worn
- Emergencies



## PFD - Type V Special-Use Devices

- Intended for specific activities and uses
- May be worn instead of another PFD
- Must be worn to be valid



#### **Check for Approved PFD**

- USCG Approved
- Water type
- User weight/size





FLOTATION AID-TYPE III PED INTENDED USE: PADDLING VEST ADULT LARGE/EXTRA LARGE

UN 90 Bu / 41 Kg CHEST SIZE: 42"-48" 106-121 cm U.S. COAST GUARD APPROVAL NUMBER, 160,664-4380-9

ROWED WEARABLE DEVICE FOR UNINSPECTED COMMERCIAL VESSELS LESS THAN 40FT (12M) IN LENGTH NOT CARRYING

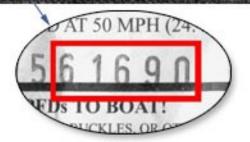
WARNING- TO REDUCE THE RISK OF DEATH BY DROWNING:

- READ MANUFACTURER'S "THINK SAFE" PAMPHEET REFORE USING THIS DEVICE AND PERFORM "THINK SAFESCHICKS EACH SEASON
- CHOOSE THE RIGHT TYPE AND SIZE FO AND WEAR IT FASTEN ALL CLOSURES AND ADJUST FOR SNUG FIT.
- FOLLOW MANUFACTURE'S USE AND CARE INSTRUCTIONS.
- DO NOT CARRYTH AVY OBJECTS. HEAVY OBJECTS IMPAIR FLOTATION

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AT CHARGE PLACED IN THE VAPILITY HIS PLOCATION OF THIS DEVICE. FOR DEPONING PLACED IN THE CHARGES or user of this device may encounter maybe inherently dangerous. No safety device or protective equipment by itself, WARNING: Some of the conditions th however designed, can absolutely prevent apply or death in all such electrostances. Any user of this device must first be adequately trained and knowledgeable about wherees in which unpredictable and uncontrollable risks may be assumed. Before purchase or use, the user is instructed to corefully study and master the slettered THPASAFE pumphlet that is provided with this device.

#550 White-Fir St.





#### **Boat Safety Equipment**

- Fire extinguisher
- Carburetor flame arrestor (inboard motors)
- Whistle, bell or horn
- Signal devices
- Lights (for night operation)



### **Boat Safety Equipment**Continued

- Paddle
- Flashlight
- Anchor
- Tool kit
- Bail bucket

- Approved safety fuel can
- Weather band radio
- Compass
- First aid kit
- Flywheel rope

### **Questions or Comments?**



#### **Check on Learning**

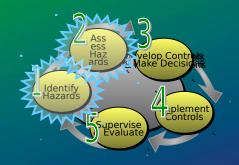
- The vast majority of boat-related injuries could be eliminated by wearing what?
  - Personal Flotation Devices (PFD)
- Approximately what percentage of boating accidents involved the use of alcohol?
  - Alcohol is involved in over 1/3 of boating fatalities
- How can we help prevent future boating injuries from happening?

#### **Enabling Learning Objective D**

**Action:** Recommend control measures that can be emplaced to reduce injuries in and around the home.

**Conditions:** Given scenarios relating to injuries occurring in and around the home.

**Standards:** A minimum of two recommendations must be provided and feasible based on the five-step Composite Risk Management (CRM) process.



### Hazards in/around the Home

- Top four hazards / injuries in the home
  - Slips, Trips & Falls
  - Poisoning
  - Fires
  - Privately-owned weapons (firearms)



## Hazards in/around the Home Continued

- Others injuries
  - Being struck by vehicle or train (RMIS 2007)
  - Suffocation of infants/children
  - Drowning
  - Cuts

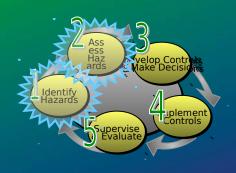


#### Slips, Trips & Falls

- All age groups
  - Showers / Tubs
  - Stairs
  - Wet floors
  - Toys
  - Balconies and windows
  - Other



Centers for Disease Control and Prevention FY 2005 / 2006 / 2007 RMIS



### Slips, Trips & Falls Continued

Army	2005	2006	2007	Total
Class A	8	2	6	16
Class B	0	0	0	0
Class C	51	80	60	191
Near Misses	?	?	?	?

Note: Military – Alcohol related in over 30%

Centers for Disease Control and Prevention FY 2005 / 2006 / 2007 RMIS

- 2007
  - Soldier was at a party in an apartment when he apparently fell from the 3rd floor balcony. Soldier is hospitalized with minimal brain activity and on life support. Permanent total disability at this time...

- 2006
  - Soldier suffered a fall down a set of stairs and suffered a fractured skull, bruising to the brain and lungs. Soldier passed away on 23 Nov 05 at the Frankfurt Medical Center from his injuries...

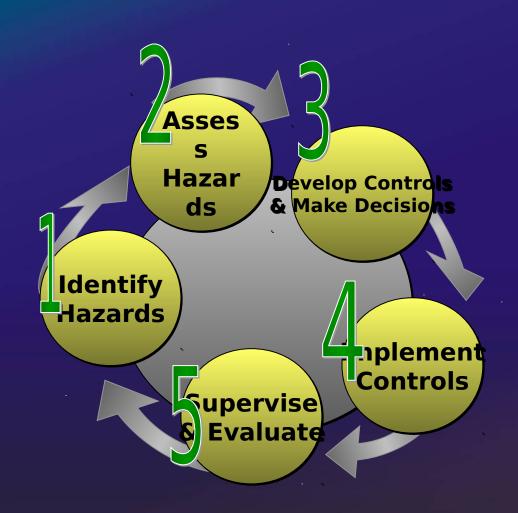
- 2005
  - -Soldier fell out of an attic resulting in traumatic brain injury; SM expired approximately two weeks later...



#### Slips, Trips & Falls Control Measures

- Good housekeeping
- Keep alcohol on ground floor
- Use buddy-team whenever possible
- Be aware of potential risks
- Other...

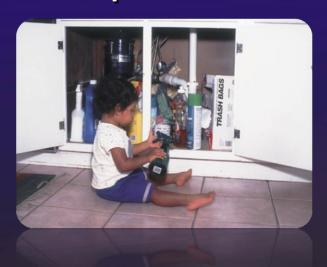
### **Poisoning Hazards**





#### **Poisoning Hazards**

- Intentional vs. unintentional
- Probability and severity of unintentional poisoning
- Categories of poisons in the home



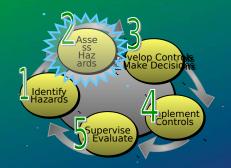


### Intentional vs. Unintentional

- Intentional
  - Suicide
  - Misuse
  - Abuse
  - Unknown

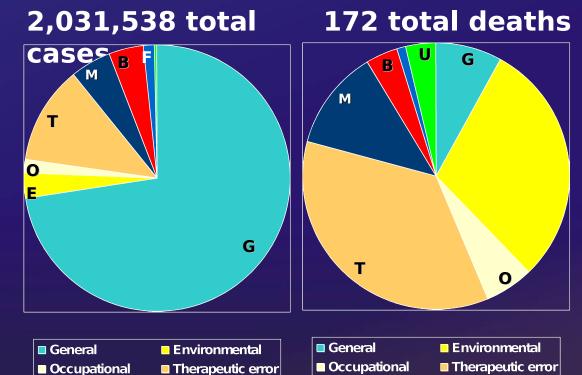


- Unintentional
  - General
  - Environmental
  - Occupational
  - Therapeutic error
  - Misuse
  - Bite/Sting
  - Food poisoning
  - Unknown



#### Unintentional Poisoning Probability & Severity

- General
- Environmental
- Occupational
- Therapeutic error
- Misuse
- Bite/Sting
- Food poisoning
- Unknown



http://www.aapcc .org

■ Bite/sting

Unknown

■ Misuse

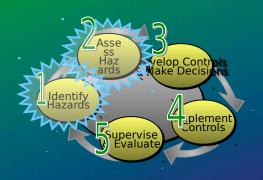
Food poisoning

■ Misuse

■ Food poisoning

■ Bite/sting

Unknown



## Top 3 Poisons in the Home

Analgesics

Cosmetics / personal care products

 Cleaning substances (household)



#### **Top 10 Exposures**

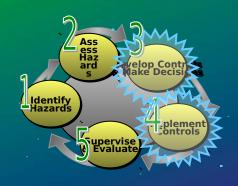
- Analgesics
- Cosmetics / hygiene products
- Cleaning substances
- Foreign bodies (toys)
- Topica Children (6 and Younger) preparations

- Cold and cough preparations
- \*Plants
- Pesticides
- Vitamins
- Antihistamines

### Plants Associated with Reported Cases of Poisoning

•	Plant categories Cases	# of
	- Peace lily 2,350	
	- Pokeweed, inkberry	2,214
	- Poinsettia 1,917	
	- Philodendron 1,679	
	- Holly 1,401	
	- Poison ivy 1,367	
	<ul> <li>Unspecified berry</li> </ul>	951
	- Oleander 766	
	- Christmas cactus 766	
	- Jade plant 722	
	- Dandelion 656	
	- Crabapple plant parts	630
	- Caladium 627	
	- Strawberry 474	

American Association of Poison Control Centers
http://www.aapcc.org



### **Control Potential Poisons**in the Home

- Use drugs / medicines as directed
- Control medicine around the home
- Secure items in locked container or cabinet
- Be aware of your surroundings



### Common Cleaning Products Determine Controls





### **Cabinet Security**



### **Home Fire Hazards**

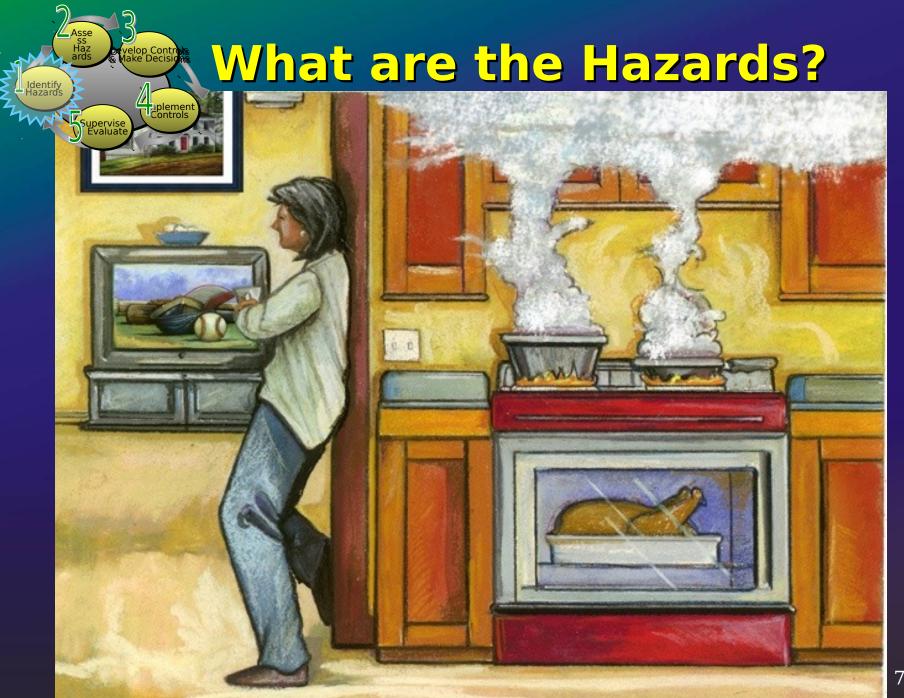


#### National Statistics - FY 2006

- Total home fires 412,267
  - Leading cause of home fire – cooking
  - Leading cause of cooking fire – unattended cooking

http://www.nfpa.org

- Home fire breakdown
  - 32% Cooking
  - 17% Heating equipment
  - 5% Candles
  - 5% Smoking
  - 4% Electrical of lighting
  - 37% Other





## **Fire Prevention Fundamentals**

- Never leave heat, flame or light source unattended
- Keep children, pets and combustibles away from cooking
- Practice proper housekeeping for fire prevention
- However, in case of fire, have a home fire extinguisher on hand to help reduce severity

Recommended Home Fire Extinguisher
Type

- Type ABC
  - A wood, paper, cloth, trash and other ordinary materials
  - B gasoline,
     grease, oil, paint
     and other
     flammable liquids
  - C live electrical equipment



# Privately Owned Weapons (Firearms)





# Accidental Discharge Scenarios

- Improper cleaning procedures
- Improper clearing procedures
- Horseplay / showing-off firearm
- Weapon falling while loaded

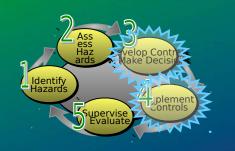


# Firearm Hazard Analysis

- Gun owners in the U.S.: 65-80 million
- American households with firearms: 45%
- Percentage of accidental deaths: 0.7%

Army	200 5	200 6	200 7	Tota I
Class A	2	1	6	9
Class B	1	2	2	5
Class C	5	15	11	31
Near Misses	?	?	?	?

National Rifle Association of America, Institute for Legislati http://www.nraila.org



# Firearm Control Measures

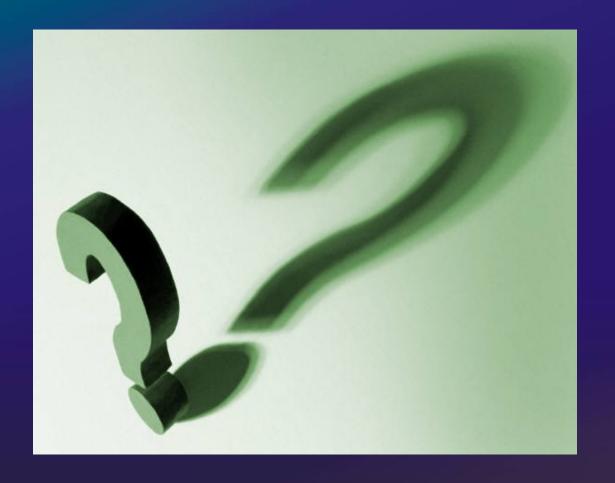
- Keep weapon secured and unloaded at all times
- Treat weapon as loaded at all times
- Pay attention to detail, know your weapon



#### **Firearm Control Measures**



### **Questions or Comments?**



### **Check on Learning**

- What is the number one category for injuries in the home within the United States?
  - Slips, trips and falls
- Name the top three poisons within the home.
  - Analgesics, cosmetics, and cleaning substances
- What is the leading cause of home fires within the United States?
  - Unattended cooking

#### Summary

 Off-duty safety and application of Composite Risk Management (CRM) to:

- Sports and recreational activities
- Swimming
- Boating
- In and around the home



#### In Conclusion . . . .

- Help maintain our combat readiness
- Demonstrate, apply, and encourage the use of CRM to all activities . . . On-duty and OFF!

